

Serial No. 10/031,311

Remarks

The Abstract has been replaced in accordance with the Examiner's guidance.

The obvious typographical error, erroneously putting the term "benzofuran" in the Claims, has been corrected with the originally intended term, "benzothiophene", as is apparent from the whole of the specification, and particularly, page 1, line 18, and page 2, line 7.

Claim 1 has been amended to further limit the claimed compounds to compounds having "n" equal to zero or one. This limitation is supported in the Specification on page 8, preferred embodiment paragraph ab).

Claim 9 is redrafted in independent form.

Claims 1, 2, 3, 4, 5, and 11 have been further amended to correct minor grammatical informalities. These grammatical amendments do not affect the intended scope or meaning of the claimed inventions therein.

No new matter is added.

Claims 1-19, currently stand rejected under 35 U.S.C. §103(a) as being obvious over US 6,353,008 ('008), US patent 6,436,964 ('964), or US patent 6,465,453 ('453). Applicants respectfully traverse, noting that the present application has an effective filing date of July 29, 1999, by virtue of the claim to priority to U.S. Provisional Application 60/146,185, as perfected by Applicant's Preliminary Amendment adding the claim thereto to the Specification, and by reference thereto in the Declaration filed in regard to this application. Applicants also note that the present application has a filing date prior to November 29, 2000 and has not been voluntarily published under 35 U.S.C. §122(b), and is thus considered a Pre-PG PUB Application (M.P.E.P. §706.02(a)), subject to the former 35 U.S.C. §102(e). Lastly, Applicants note that the three references cited qualify as art under §102(a) and §102(b) as of their earliest publication dates, which are their PCT publication dates (all January 6, 2000), and qualify as art under §102(e) as of their §371(c)(1),(2),(4) dates (all November 28, 2000), all of which dates are after the present application's effective filing date. Thus, the three cited references do not qualify as art to be cited against the present application. Applicants respectfully request the withdrawal of the present rejection based on 35 U.S.C. §103(a).

Serial No. 10/031,311

Claims 1, 2, and 11-19 presently stand rejected under the judicially created doctrine of obviousness type double patenting over Claim 16 of the '453 patent. Applicants have obviated the rejection as applied to Claim 1 by amending Claim 1 to limit n to being zero or one.

Applicants respectfully traverse this rejection as it applies to Claims 2 and 11-19, in that Claim 16 of the '453 patent is drawn to tetrahydroazepine/azacycloheptane analogs, taught to be nothing more than intermediates in the synthesis of compounds having multiple activities as serotonin reuptake inhibitors, 5-HT_{1A} antagonists, and 5-HT_{2A} antagonists. The reference does not teach or suggest the presently claimed compounds as pharmaceuticals in themselves, much less their usefulness as 5-HT_{2C} agonists for the presently claimed methods of treatment. Applicants respectfully submit that there is no overlap between the referenced Claim and amended Claim 1 or Claims 2 and 11-19, and further that the presently claimed 5-HT_{2C} agonists are not obvious in light of the reference to synthetic intermediates. Applicants therefore respectfully request withdrawal of the double patenting rejection.

Claim 2 presently stands rejected under the judicially created doctrine of obviousness type double patenting over Claim 16 of the '453 patent. Applicants note that Claim 2 is drawn to pharmaceutical formulations containing the 5-HT_{2C} agonists of Formula I as recited therein (note that in Claims 2-10, n remains equal to 0, 1, or 2). The '453 patent does not teach or suggest the compounds of its Claim 16 for use in pharmaceutical formulations, or for any use other than as intermediates in the synthesis of other compounds. Thus it is not obvious from the cited reference that those intermediates would have any activity at all, much less the presently disclosed 5-HT_{2C} agonist activity. Withdrawal of the double patenting rejection of Claim 2 is respectfully requested.

Claims 1, 2, and 11-19, currently stand rejected under 35 U.S.C. §102(f) (and possibly §102(g) though this is unclear) as being anticipated by the '964 patent, or WO 01/46142 ('142), or WO 01/46143 ('143). Applicants respectfully disagree with Examiner's assertion that a threshold of evidence has been presented to properly raise an inquiry regarding the appropriate inventorship under subsection (f) (or (g)), much less a rejection there under.

Both the '142 and '143 applications have the same priority date as the present application and are clearly drawn to process improvements rather than the discovery of new chemical entities. Furthermore, neither the '142 nor '143 applications describe substitution of the piperidine moiety on the 4- or 7-position of benzothiophene rings, nor do they describe or suggest the 5-HT_{2C} activity of such compounds and their use in the presently claimed 5-HT_{2C} mediated methods of treatment. Thus all that may be said of these references is that

Serial No. 10/031,311

they describe a process that might be used with some modification in the synthesis of the presently claimed compounds, as for example, a process improvement. Both references and the present Application are commonly assigned; clearly all are research employees of the same Assignee with common interests and obligations toward the owner of the inventions. All named inventors on all applications have made declarations as to the correct inventorship of each application and all have the same interest, together with the filing practitioners, to name the correct inventorship to avoid complications with the validity of ensuing patents. There is no evidence that would justify an inquiry into inventorship under either 35 U.S.C. §102(f) or 35 U.S.C. §102(g). It is unreasonable to suggestion that the declared inventorship in these three applications is incorrect or should be inquired after; no other conclusion is reasonable on its face other than that the named inventors in the present Application invented the claimed compounds and that the inventors of the reference applications invented the described and claimed processes which might be useful in the production of some of the presently claimed compounds.

The '964 patent shares more than half of its inventors with the present Application and there is clearly no overlap of claimed subject matter. The reference and the present Application are commonly assigned; clearly all are research employees of the same Assignee with common interests and obligations toward the owner of the inventions. All named inventors on the referenced patent and present Application have made declarations as to the correct inventorship of each application and all have the same interest, together with the filing practitioners, to name the correct inventorship to avoid complications with the validity of ensuing patents. There is no evidence other than common "authorship" which is insufficient to justify an inquiry into inventorship over the respective declarations, under either 35 U.S.C. §102(f) or 35 U.S.C. §102(g). It is unreasonable to suggestion that the declared inventorship in the reference and the present Application is incorrect or should be inquired after; no other conclusion is reasonable on its face; there is no conflict of inventor's interests to evidence a need to inquire into Applicants' declared inventorship.

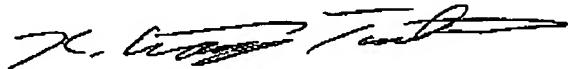
Be this as it may, in order to facilitate the allowance of the present Application, Applicants submit herewith affidavits under 37 C.F.R. §1.132 avering that the questioned subject matter in the '964 patent describes their own work and that the disclosed, but not claimed compounds in the process improvement patent applications, the '142 and '143 applications, were derived from them. This satisfies any showing that might be deemed necessary to lead to the correct conclusion that Dr. Xu, Mr. Kohlman, and Mr. Liang invented the questioned subject matter in the cited references. Withdrawal of the rejection(s) and favorable settlement of any inventorship inquiry is respectfully requested.

It is believed that all rejections, objections, and inquiries have been obviated,

Serial No. 10/031,311

overcome, or otherwise satisfied. A timely Notice of Allowance and passage of the present Application to Grant is respectfully requested.

Respectfully submitted,



R. Craig Tucker
Attorney for Applicants
Registration No. 45,165
Phone: 317-433-9829

Eli Lilly and Company
Patent Division
P.O. Box 6288
Indianapolis, Indiana 46206-6288

